

**AWD Water Management for Irrigated Rice Project
IRRI-SPIA-NIA
(Second Round)**

Place: _____ Date: _____ Interviewer: _____ Record No: _____
Cellphone No. _____

I. GENERAL INFORMATION

1. Name of Farmer: _____ 2. TSA code: _____ 3. Lateral: _____ IA: _____

A. Changes in Household Profile (2017)

Household member	Age (years)	Sex ¹	Civil Status ²	Years in school	Income Source			
					Primary	Amount/ month (P)	Secondary	Amount/ month(P)
Added:								
Deleted:								
With Changes (in Status/Income):								

¹ Sex: M=male F=female

² Status: S=single M=married W=widow/widower P=separated O=others,specify _____

II. Agricultural Land Profile (Dry Season 2016-17)

A. Land Profile :

Total area of the farm _____ ha; Total area planted to rice _____ ha.; No. of rice parcels (2016-17 dry season) _____

Total area of Main Parcel (2016-17 dry season) _____ ha. [Parcel No:_____]

For the table below, kindly record only those parcels with changes from last year (added, deleted, changed in area).

Parcel Number	Parcel Size (ha)	Dry season rice crop (Nov. 2016 – Apr. 2017)			T e n u r e (2017 dry)		
		Variety	Irrig. Water Source (Code A)	Power Source for irrigation (Code B)	Type (Code E)	Arrangement	Amount paid (pesos) if any
Main							

Code A : Irrig. Water Source: 1=canal 2=private pond(single ownership) 3=private pond (joint ownership) 4=river 5=spring 6=rain 7=others(specify) _____
 Code B: Irrig. Power Source 1=gravity 2= pump (single owner) 3= pump (joint ownership) 4=rainfed
 Code E: Tenure status 1=Owner 2=Share tenant 3=Lease (fixed payment cash) 4=Lease (fixed payment/in-kind) 5=CLT 6=Mortgaged 7=Others(specify)_____

Did you have a third cropping this year (Jan/Feb, 2017 – Apr/May, 2017)? _____ Yes _____ No . **If yes, why?** _____

*******To the Interviewer: If the farmer had a third cropping, you are to collect data only for the third crop in this survey. *******

B. For the main parcel, did you use subsidized inputs (seeds, fert, etc) provided by government in 2016-17? _____ Yes _____ No

If yes, what are these and the cost of the inputs: _____

IV. Rice Production System (main parcel, last dry season Nov. 2016 – Apr. 2017)

A. Crop Establishment (Main parcel)

ITEM	Transplanted Rice	Pre-germinated Broadcasted
Date of crop establishment		
Rice variety 1		
Amount of seeds used: variety 1		
Amount of seeds used: variety 2		
Price of seeds: Variety 1		
Price of seeds: Variety 2		
Source of seeds: Variety 1		
Source of seeds: Variety 2		
Age of seedlings		
Number of seedlings per hill		
Transplant random or square		
If square spacing (cm x cm)		

B. Labor input for Land Preparation and Crop Establishment (Main Parcel).

Activity	Date	Source of Power (Code A)	Type Code B	Rental (Peso)	Fuel and oil cost (Peso)	Labor Input							Food Cost (Peso) /day/all
						Family		Exchange		Hired			
						# of persons	Hours worked/ person	# of persons	Hours worked/ person	# of persons	Hours worked/ person	Wage /day/ person	
<u>Land Preparation</u>													
Cleaning/ repair of dikes													
Seedbed preparation													
Plowing1													
Plowing2													
Harrowing1													
Harrowing2													
Rotavating													
Levelling													
<u>Crop Establishment</u>													
Pulling/bundling of seeds													
Hauling of seedlings													
Transplanting/Sowing													
Thinning/gap filling													
Others (Specify)													

Code A: Source of power 1= tractor/machine 2= animal 3= manual 4= others (specify)
 Code B: Type 1= owned 2= rented 3= borrowed

D. Fertilizer and Pesticides applications (Main Parcel)

1. Chemical Fertilizer Application (with associated labor)

Date of appl'n	Soil condition Code A	If with standing water, depth of water (cm)	Brand	Composition			Qty applied	Unit	Cost/unit	Labor Input						Food Cost (peso/day/all)
				% N	% P ₂ O ₅	% K ₂ O				Family		Exchange		Hired		
										# of persons	Hrs worked/person	# of persons	Hrs worked/person	# of persons	Hrs worked/person	

Code A: Soil condition 1= dry 2= wet 3= standing water

2. Manure application (with associated labor)

Date of Appl'n	Soil condition (Code A)	In case of standing water, depth of water (cm)	Type ^b	No. of bags	Kg./bag	Cost per bag (Peso)	Labor Input						Food cost (Peso/day/all)	
							Family		Exchange		Hired			
							# of persons	Hrs worked/person	# of persons	Hrs worked/person	# of persons	Hrs worked/person		Wage/day/person

Code A: Soil condition: 1=dry 2= wet 3= standing water

^bType: 1= Green 2=Animal 3= Human 4= Others (specify)

3. Manual/Mechanical weed control (with associated labor)

Operation date	Method of control (Code A)	Labor Input							
		Family		Exchange		Hired			
		# of persons	Hrs worked/person	# of persons	Hrs worked/person	# of persons	Hrs worked/person	Wage/day/person	Food cost (Peso/day/all)

Code A: Method of control: 1=Hand weeding 2=Rotary weeder 3=Improvised wooden weeder 4=Others (specify)

4. Herbicide Application (with associated labor)

Date of Application	Brand	Percent AI*	Amount applied	Unit	Cost/unit	Labor Input							Food Cost (Peso/day/all)
						Family		Exchange		Hired			
						# of persons	Hrs worked/person	# of persons	Hrs worked/person	# of persons	Hrs worked/person	Wage/day/person	

*AI=Active Ingredient

5. Insecticide/Molluscicide/Rodenticide application (with associated labor)

Application date	Brand	Percent AI*	Amount applied	Unit	Cost/unit (Peso)	Labor Input						Food Cost (Peso/day/all)
						Family		Exchange		Hired		
						# of persons	Hrs worked/person	# of persons	Hrs worked/person	# of persons	Hrs worked/person	

*AI=Active Ingredient

E. Extension Services

- In the last dry cropping season, did you get technical assistance in rice farming from any of the the following?
 ___ Ag. technician; ___ Input dealer; ___ Others (specify): _____
 If from ag. technician, how many times did you get assistance in the last dry cropping season? _____
- Did you attend any ag. production lectures or training on rice production last year? ___ Yes ___ No.
- [For farmers in treated TSAs]:** Did you (or anyone in your household) attended the Alternate Wetting and Drying (AWD) irrigation training conducted by the IRRI-Philrice team last year? ___ Yes ___ No. If no, why not _____
- [For farmers in control TSAs]:** Did you hear (or know) about the Alternate Wetting and Drying (AWD) irrigation training conducted by the IRRI-Philrice team last year? ___ Yes ___ No. If yes, where (or from whom) did you hear about AWD? _____

F. Credit

1. Did the farmer borrow money last cropping season (dry season, 2016-2017)? ___ Yes ; ___ No *If YES, fill up the table below:*

Source (Code A)	Date Borrowed	Amount (Pesos)	Interest Rate/yr	Collateral/Requirements	Maturity	Distance from farm (km)

A Source: 1=Banks 2= Association 3= Cooperative 4=Other farmers/friends 5=others, specify

2. Did you buy crop insurance last season? ___ Yes; ___ No. From whom? _____ Premiun Paid _____

V. Irrigation activities

1. How often do you irrigate your field in the dry season? ___ Once a week; ___ once every 2 weeks; Others, specify _____

2. How many times did you irrigate for the whole dry season (last cropping) this year? _____

Source: ___ Gravity/NIA; ___ Deep well pump; ___ Shallow tubewell; ___ Pumped from river/canal; ___ Rainfall;

Others, specify _____. If from deep well pump, shallow tubewell and/or pumped from river or canal, why did you use this? _____

3. How do you know if you need to irrigate? _____

4. In the last dry cropping season, how many days was the main rice parcel left without standing water (total for the whole growing period)? _____ days.

5. If answer to question 4 is not zero, then answer the following:

a. How many days was the main rice parcel without standing water up until transplanting/sowing? _____ days.

b. How many days was the main rice parcel without standing water in the crop growth stage? _____ days.

c. How many days was the main rice parcel without standing water in the flowering stage? _____ days.

d. How many days was the main rice parcel without standing water at the grain filling and ripening stage? _____ days.

5. Have you utilized strategies to save water? ___ Yes; ___ No. If yes, what are these? _____

6. Did you practice Alternate Wetting and Drying (AWD) on your rice field last dry season? ___ Yes ___ No.

7. If you answered Yes in question 6, please answer the following questions:

a. Did you use the field water tube (PVC pipe) to monitor water depths in the main rice parcel? ___ Yes ___ No.

If yes, how often do you monitor the water depth in the tube? ___ Everyday ___ Once a week ___ Once every 2 weeks; Others: _____

b. In the crop growth stage, did you start to irrigate if there is no water in the filed water tube? ___ Yes ___ No.

c. Did you have any problems in practicing AWD? _____

8. Did you experience irrigation water shortage during the last dry cropping season? ___ Yes; ___ No.

9. Did you hear about any conflicts regarding irrigation water in your area during the last dry cropping season? ___ Yes; ___ No.

10. Did you heard about any water thefts in your area during the last dry cropping season? ___ Yes; ___ No.

A. Ask the farmer on his irrigation activities during the last dry season (2016-2017) rice crop for the main parcel only.

Operation /activities	Date of water application	Condition of soil before irrigation event (Code A)	In case of standing water, depth of water before irrigation event (cm)	Depth of water (cm) applied after irrigation event	Duration of water application (hrs)	Water source (code B)	Labor source (Code C)	No. of hours Worked	If hired, wage/day /person	Other costs
Seedbed preparation										
Land Preparation										
Transplanting/sowing										
Crop growth period (DAP)										
a.										
b.										
c.										
d.										
f.										
g.										
Flowering										
Other, specify										

Code A: 1=dry 2=wet 3= standing
 Code B: 1= canal/NIA 2= Pump 3= pond 4= river (pumped) 6= drainage 7= others, specify

B. Irrigation fee paid to NIA last dry season crop (Nov 2016-Apr 2017) for the main parcel. _____ (If farmers paid total for all his parcels, calculate the fee for the main parcel only).

C. Knowledge, Attitudes and Perceptions. Ask the farmer if the statement is **TRUE or FALSE**. IF the farmer's answer is **NO COMMENT**, proceed to the next statement. Put a check (✓) on every answer.

Statement	Knowledge and Attitudes		
	1= Agreee	2= Disagree	3= No comment
1. It is bad for the plants if the paddy field is allowed to become dry for a week.			
2. Water is the food of the plants.			
3. Allowing the paddy field to alternately be flooded (wet) and dried at tillering stage results in more tillers and panicles.			
4. Allowing the paddy field to alternately be flooded (wet) and dried at tillering stage minimizes lodging problems.			
5. Keeping low water level at tillering stage will result in more tillers and panicles.			
6. Permanently flooding the rice field until 1-2 weeks before harvest results in higher yield.			
7. More weeds will grow if the field is not continuously flooded.			
8. Water helps the rice plant to use soil nutrient efficiently.			
9. Water depth should be more than 5 cm every irrigation time.			
10. The more water the better for the plants.			
11. Less water can hurt the crop.			
12. If the soil is allowed to dry for a while, the roots go deeper.			
13. Our irrigation schedule is the best for my farm.			
If disagree, how would you want your irrigation schedule to be?			

D. Contribution to irrigation management last cropping season (Nov 2016- Apr 2017)

Activity	Way of contribution (Code A)	Labor contribution		Monetary contribution (total amount in peso), include penalty payment in case of absence
		Number of persons	Hours worked/person	
Main canal cleaning				
Lateral cleaning				
MFD cleaning				
TSA meeting				
IA meeting				
Irrigation monitoring				

VI. Harvesting and Threshing (Main Parcel)

- A.** Total gross paddy production in the last dry season _____ cavans (wet) _____ cavans (dry)
 _____ kg per cavan (wet) _____ kg per cavan (dry)
- B.** Price of paddy _____ Price per kg (wet) _____ price per kg (dry)
- C.** Distribution of production (cav.): Landlord share _____ seeds _____ home consumption _____ Irrigation payment _____
 Payment to creditors _____
- D.** When was crop harvested (starting date of harvesting)? _____
- E.** Was this harvest above average, below average, or normal? _____
 If not normal, why? _____
- F.** After harvest, what did you do to the rice straw?
 _____ Burnt in field
 _____ 100% was left in the field and incorporated during land preparation
 _____ About 50 percent was left in the field and incorporated during land preparation
 _____ 100% was taken out of the field for other uses
 Others, specify: _____

G. Labor input for harvesting/threshing (Main Parcel)

Activity	Date	Source of power (Code A)	Type ² (Code B)	Rental total cost (Peso)	Fuel and oil cost (Peso)	Labor Input						Food/ Other Cost
						Family		Exchange		Hired		
						# of persons	Hrs worked /person	# of persons	Hrs worked /person	# of persons	Hrs worked /person	
Harvesting												
Threshing												
Hauling1 ^{1/}												
Hauling2 ^{2/}												
Drying (solar)												
Drying (mechanical)												
Others specify												

Code A: 1= tractor/machine, 2= animal 3= thresher , 4= manual, 5=others (specify) Code B: 1= owned 2= rented (i.e. with payment) 3= borrowed(i.e. without payment)

^{1/} Hauling1 = hauling of harvested palay stalks from field to threshing site

^{2/}Hauling2=hauling of threshed palay in sacks from threshing site either to farmer's house or to dryer.

VII. INCOME SOURCES (last dry season)

Income source	Income
Rice (total for the farm last cropping)	_____
Sale of other crops/week	_____
Sale of poultry/week	_____
Sale of livestock (specify frequency)	_____
OFW remittances (per month)	_____
Domestic remit. (family/friends/P/month)	_____
Others (specify):_____	_____
_____	_____